

REMARKS

I. INTRODUCTION

No new matter has been added. Thus, claims 1-10 remain pending in this application. It is respectfully submitted that based on the following remarks, all of the presently pending claims are in condition for allowance.

II. THE 35 U.S.C. § 102(b) REJECTIONS SHOULD BE WITHDRAWN

Claims 1-5, 8 and 10 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,717,821 to Tsutsui et al. (hereinafter “Tsutsui2”). (See 10/14/08 Office Action, p. 3).

Claim 1 recites, “combining amplitudes of frequency components within said local frequency band from which at least one of the candidate sinusoids within said local frequency band is excluded.” The Examiner asserts that the above recitation of claim 1 is taught in Tsutsui2 in column 13 lines 3-6. (See 10/14/08 Office Action p. 4). Applicants respectfully disagree.

Tsutsui2 states that, “At step S6, energy value of neighboring spectrum (e.g., sum of energies of spectrum components adjoining to corresponding spectrum in both directions) of the spectrum absolute value (maximum absolute value spectrum) is substituted for variable X. At the subsequent step S7, energy value within a predetermined band including the maximum absolute value spectrum and the neighboring spectrums thereof is substituted for variable Y.” (See Tsutsui2 col. 13, ll. 3-10). Tsutsui2 looks at neighboring spectrums and sums the energies of the spectrum components of the neighboring spectrum in both directions. Tsutsui2 then sums the energy in the selected band. The ratio of the two values is then used to determine which step to proceed to. (See Tsutsui2 col. 13, ll. 11-17). Tsutsui2, however, makes no mention of, “combining amplitudes of frequency components within said local frequency band from which *at*

least one of the candidate sinusoids within said local frequency band is *excluded*,” as recited in claim 1. Tsutsui2 does not exclude any of the energies of the spectrum components; all of the energies are added and used in the ratio. It appears the Examiner may be confusing the fact that the tone characteristics are separated from the noise characteristics in Tsutsui2 as indicating that either the tone characteristics or the noise characteristics are not included in the summation of Tsutsui2. However, this separation in Tsutsui2 is a result of the summation of all the signals in the frequency band, the tone characteristics and the noise characteristics are not excluded from the summation, but all are used to determine how the signal should be separated. Therefore, Applicants submit that Tsutsui2 does not teach or suggest the above limitation of claim 1.

Claim 1 further recites, “selecting said candidate sinusoid as a selected sinusoid in dependence on the combination of amplitudes.” The Examiner asserts that the above recitation of claim 1 is taught by Tsutsui2 in column 13 lines 3-35. (See 10/14/08 Office Action p. 4) Applicants respectfully disagree.

In Tsutsui2 column 13 lines 3-35 a ratio of the energies of the surrounding spectrum components is compared the energies of the selected spectrum components. Once the ratio of the surrounding energies of the spectrum components is compared to the energies of the selected spectrum components, the system then either proceeds to step 9 or step 10. (See Tsutsui2 col. 13, ll. 3-17). In step 9, the signal of the maximum value spectrum component and signals of spectrum components from both directions are considered to be tone characteristic components. In step 10, a final processing of the signal is performed. (See Tsutsui2 col. 13, ll. 26-30). Tsutsui2, however, makes no mention of “selecting said candidate sinusoid as a selected sinusoid in dependence on the combination of amplitudes,” as recited in claim 1. Tsutsui2 first selects the defined spectrum components and then adds the energies of the components. Tsutsui2 does not analyze the energies of the spectrum components and then define the selected spectrum. As such, Tsutsui2 cannot teach the above limitation of claim 1. Therefore, Applicants submit that claim 1 is patentable over Tsutsui2. Because claims 2-5 depend from, and therefore include all the limitations of claim 1, it is respectfully submitted that these claims are also allowable for at least the same reasons given above with respect to claim 1.

Independent claim 8 recites, “means for combining amplitudes of frequency components within said local frequency band from which at least one of the candidate sinusoids within said local frequency band is excluded; and means for selecting said candidate sinusoid as a selected sinusoid in dependence on the combination of amplitudes.” Applicants submit that this claim is also allowable for at least the same reasons stated above with respect to claim 1. Because claim 10 depends from, and therefore includes all the limitations of claim 8, it is respectfully submitted that this claim is also allowable for at least the same reasons given above with respect to claim 8.

III. THE 35 U.S.C. § 103(a) REJECTIONS SHOULD BE WITHDRAWN

Claims 6, 7 and 9 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Tsutsui2 in view of U.S. Patent No. 5,054,072 to McAulay et al. (hereinafter “McAulay”). (See 10/14/08 Office Action, p. 6).

Applicants submit that McAulay does not cure the above-described deficiencies of the Tsutsui2 with respect to claims 1 and 8. Because claims 6 and 7 depend from, and therefore include all the limitations of claim 1, it is respectfully submitted that these claims are also allowable for at least the same reasons given above with respect to claim 1. Because claim 9 depends from, and therefore includes all the limitations of claim 8, it is respectfully submitted that this claim is also allowable for at least the same reasons given above with respect to claim 8.

CONCLUSION

In view of the above remarks, it is respectfully submitted that all the presently pending claims are in condition for allowance. All issues raised by the Examiner having been addressed, an early and favorable action on the merits is earnestly solicited.

Respectfully submitted,

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